

Cancer Laid to Air Pollution

By Morton Mintz
Staff Reporter

CINCINNATI, May 25
New evidence pointing to air pollution as a prime cause of lung cancer—and de-emphasizing the role of cigarette smoking—was reported today by Dr. W. C. Hueper of the National Cancer Institute.

His research was hailed as a landmark by Dr. Richard A. Prindle, medical air pollution chief of the Public Health Service.

Dr. Hueper said his study shows the rate of lung cancer in Birmingham, Ala., triple the national average, corresponds closely with the level of benzpyrene in its air.

Birmingham is thus indicated to be like the British industrial cities that have a similar correlation and also burn coal in large quantities.

Benzpyrene in Air

Last month PHS said benzpyrene was in all the air samples it collected in 103 cities. The concentrations were puzzling — Washington's, for example, was higher than industrial Pittsburgh's.

Dr. Hueper told the Air Pollution Control Association today that benzpyrene was found to be a reliable index to the cancer danger in the air only in Birmingham.

It was found in lesser amounts in the other cities studied — Atlanta, Cincinnati, Detroit, Los Angeles, New Orleans, Philadelphia and San Francisco. But it had no correlation with the potency of other cancer-producers in their air or with their lung-cancer rates.

Benzpyrene, also found in cigarette smoke, is only one

of many airborne pollutants that cause cancer in laboratory animals and are suspected to cause it in man.

Variation In Cities

Dr. Hueper concluded that the "atmospheric carcinogenic spectrum" in American cities is of almost incredible individuality, varying with local conditions and not susceptible to any uniform analysis. Only a massive assault can pinpoint the air's cancer potential, he said.

Air samples were collected in the eight cities, which have different types and causes of air pollution, and separated into extracts by E. C. Tabor and Eugene Sawicki of the PHS Robert A. Taft Sanitary Engineering Center here.

The extracts were "roughly

THE WASHINGTON POST
Washington, D.C.
May 26, 1960

representative" of the air during the month-long sampling period. All can be created when any fuel is burned or distilled in many industrial processes. They were injected under the neck skin of thousands of mice at the Cancer Institute in Bethesda and at the University of Southern California.

The Birmingham extracts, Dr. Hueper said, caused an incidence of tumors related to the rate of human lung cancer there.

He said the pollutants other than benzpyrene in the extracts from all eight cities produced tumors in the mice.

And, he said, the evidence "makes it likely" that pollutants of these types "have played an important role in the progressive increase of

the frequency of lung cancers during recent decades."

As to cigarette smoking, Dr. Hueper ridiculed claims that it causes between 60 and 96 per cent of all lung cancers in males.

He conceded that quite likely it plays both a direct and indirect role. But, he said, it cannot have overwhelming importance in the face of such factors as:

- A lung cancer rate much higher among urban than rural smokers.

- An upswing in European lung cancers before cigarette smoking was common.

- A much greater rate of lung cancer among Britons who emigrated to New Zealand and South Africa than among the native-born who smoke as much.

TIMES

Pawtucket, Rhode Island
May 7, 1960

Good News For The Farmer

CIGARETTES MAY, or may not, be the cause of cancer of the lung. Doctors and researchers do not know the role of cigarettes in the cancer problem, but that fact did not deter a cigarette smoker from seeking damages from a cigarette manufacturer whose product was cited in the background of lung cancer surgery.

The court did not hold with the cigarette smoker. The court could not do otherwise, because the United States Public Health Service has found a suspected cause for cancer in the air we breathe, not only in the cigarette smoke we inhale. In the air of 103 American cities researchers have found a substance called benzpyrene. It is so abundant in some cities, that an individual breathing such

air would inhale as much benzpyrene as from smoking two or more packages of cigarettes daily.

Where does this perilous substance come from? It comes mainly from the burning or distilling of fuels in furnaces. The average city dweller inhales air that is 16 times more polluted with benzpyrene than the air breathed by the rural dweller.

If the farmer finds the air he breathes is less polluted than the air consumed by his city cousin will he be more satisfied with his lot, which is not so bad, what with crop subsidies and allotments for taking land out of production and the multitude of other farm benefits which cost the rest of us taxpayers \$6 billion annually.

UPI - 62 (TOBACCO)

May 10, 1960

CINCINNATI -- A SURVEY INDICATES THAT A NON-SMOKER IN A BIG CITY INHALES MORE OF A CHEMICAL SUSPECTED OF CAUSING LUNG CANCER THAN A PACK-A-DAY SMOKER IN THE SUBURBS, A SCIENTIST SAID YESTERDAY.

DR. EUGENE SAWICKI OF THE ROBERT A. TAFT SANITARY ENGINEERING CENTER HERE, REPORTED ON RESULTS OF AN 18-MONTH PRELIMINARY STUDY OF THE BENZPYRENE CONTENT OF THE AIR IN 103 CITIES AND 28 RURAL AREAS.

BENZPYRENE IS BELIEVED TO COME FROM THE INCOMPLETE BURNING OF FUELS, WASTE MATERIALS, AND OTHER COMBUSTIBLE SUBSTANCES. IT ALSO IS ASSOCIATED WITH TARRY SUBSTANCES.

SAWICKI SAID A PACK-A-DAY SMOKER INHALES ABOUT 60 MICROGRAMS OF THE CHEMICAL PER YEAR, WHILE THE AVERAGE NON-SMOKER HERE WOULD INHALE ABOUT THE SAME AMOUNT.

HE SAID AN AVERAGE NON-SMOKER WOULD BE A PERSON WHO WORKS IN A CITY AND LIVES IN A SUBURB. A PERSON WHO LIVES AND WORKS IN THE DOWNTOWN AREA WOULD INHALE MORE, HE SAID.